

SECTION 02400 - DRAINAGE

PART 1 - GENERAL

Modify this section as applicable to your job.

1.01 GENERAL CONDITIONS

As specified in Section 00700.

1.02 SUBMITTALS

A. Certificates

Before installation, submit to the Engineer affidavits from the manufacturers or suppliers of pipe, pipe coating and fittings proposed to be furnished and installed under this section certifying that such materials delivered to the project conform to the requirements of these specifications.

PART 2 - PRODUCTS

2.01 MATERIALS

A. Asbestos Prohibition: No asbestos containing materials shall be used under this section. The Contractor shall insure that all materials incorporated in the project are asbestos-free unless specifically approved in writing by the Engineer.

B. Materials for drainage system shall be in accordance with the below-listed sections of the Counties' STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION dated May 1975 and STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION dated August 1976 as revised, except as amended in the plans and/or specifications herewith.
(Paragraphs concerning Measurements and Payments in the Sections are not applicable to this project.)

1. Subsurface Drains Section 28
2. Drain Pipes (Reinforced
Concrete Pipe; Appurtenances) ... Section 24
3. Drain Manholes Section 25
4. Portland Cement Concrete Section 39
5. Reinforcing Steel Section 48
6. Filter Material Section 28

Modify this list to fit your job.

If any details from the "Std. Det." are to be followed, note the exact detail on plans.

PART 3 - EXECUTION

3.01 INSTALLATION

A. Location of Utility Lines

1. The Contractor shall be responsible for precisely laying out the various storm drain lines shown on the drawings.
2. Prior to the actual work of constructing the drain system, the Contractor shall excavate and expose all utility facilities which will be crossed by the new drain and verify their elevations with respect to the new drain grades. Elevations of inverts of new drain lines to be connected to the existing drain shall be verified at their points of connections under this requirement.
3. Should the actual elevation of any existing utility show a possible discrepancy which may affect the alignment and grade of the new drain, the Contractor shall immediately notify the Engineer of his findings and shall not proceed with the drain construction until authorized to do so by the Engineer.
4. In performing all work the Contractor shall exercise due care and caution necessary to avoid any damage to, and impairment in the use of, any existing utility line. Any damage to existing lines resulting from the Contractor's operations shall be immediately repaired and restored as approved by the Engineer at the Contractor's expense.

- B. Excavation and Backfill: Trench excavation and backfill for the laying and installation of drain pipes, to the required line and grade, shall be governed by the following provisions of the Counties' STANDARD SPECIFICATIONS FOR PUBLIC WORKS dated May 1975 and STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION dated August 1976 except as amended in the plans and/or specifications herewith. (Paragraphs concerning Measurements and Payments in the Sections are not applicable to this project.)

1. Trench Excavation and Backfill ... Section 11
2. Roadway Excavation Section 12
3. Restoring Pavements and Other
Improvements Section 38

If any details from the "Std. Det." are to be followed, note the exact details on plans.

- C. Storm Drainage Piping and Drainage Structures:
Installation shall be in accordance with the
applicable sections noted hereinbefore.

3.02 FINAL INSPECTION

At the time of final inspection of the work performed under the contract, the utilities covered by this section shall be complete in every respect and operating as designed. All surplus materials of every character resulting from the work of this section shall have been removed. Drainage lines and manholes shall be free from sand, silt or other obstructions. Any defects discovered in the utilities subsequent to this inspection shall be corrected prior to final acceptance.

END OF SECTION